

# Urinary incontinence in women

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## Contents

[Basic rule](#)

[Types of incontinence](#)

[Epidemiology](#)

[Etiology](#)

[Investigations](#)

[Indications for specialized investigations \(ultrasonography, radiography, urodynamics\)](#)

[Treatment](#)

[Related evidence](#)

[Bibliography](#)

## Basic rule

- Differentiate between the two main types of incontinence: stress incontinence and urge incontinence

## Types of incontinence

1. Loss of urine on exertion (**stress incontinence**) is the problem in 3/4 of adult incontinent patients.
2. **Urge incontinence** is due to bladder dysfunction where the need to void is so sudden that loss of urine occurs before the patient makes it to the toilet. It occurs typically in elderly women after the menopause, but also in young women.
3. A combination of the two types is called **mixed incontinence**.
  - In institutionalized patients, incontinence often is caused by cerebral ischaemia or dementia.
  - **Overflow incontinence** may occur after surgery.

## Epidemiology

- The prevalence in adult women (of 25 to 55 years of age) is about 20 per cent. Every second patient conceals her problem.

- The prevalence is 15 per cent in women of 35, and 28 per cent in women of 55.
- After retirement, about 50 per cent of both men and women suffer from urinary incontinence.

## Etiology

- In **stress incontinence** the pelvic floor may be weakened due to excessive body weight (> 20 % overweight), pregnancy, deliveries, and heavy work. Stress incontinence may also be caused by connective tissue weakness, asthma, or muscle-relaxant drug such as prazosine.
- **Urge incontinence** is a consequence of chronic bladder irritation. It can be related to
  - recurrent urinary tract infections
  - past surgery for incontinence
  - estrogen deficiency after menopause
  - diabetes or multiple sclerosis
  - use of medicines, such as neuroleptics and diuretics.

## Investigations

- Exclude urinary tract infection by urine culture.
- A questionnaire differentiates fairly well between stress incontinence and urge incontinence.
- Exclude tumors by examination (and endoscopy if required).

## Indications for specialized investigations (ultrasonography, radiography, urodynamics)

- Annoying symptoms, especially if dominated by urge incontinence
- Recurrence of symptoms after surgery

## Treatment

- A questionnaire assessing the seriousness of the problem helps in determining the urgency of investigations and treatment.
- Postmenopausal women with minimal symptoms should try local estrogen therapy (a vaginal suppository twice a week) (Level of Evidence = B; Evidence Summary available on the EBM Web site). Local estrogen is more effective than systemic estrogen for either type of incontinence.
- Patients with mild stress incontinence
  - Weight reduction
  - Exercises to strengthen the muscles of pelvic floor (Level of Evidence = A; Evidence Summary available on the EBM Web site)
- Patients with mild urge incontinence
  - Bladder schooling (normalizing the micturition interval) (Level of Evidence = B; Evidence Summary available on the EBM Web site)
  - The drug of choice is tolterodine. The dose is usually 2 mg twice a day.
- Electrical stimulation is worth trying in both types of incontinence (in stress incontinence the muscles of the pelvic floor are stimulated, in urge incontinence the overactivity of bladder muscles is decreased) (Level of Evidence = D; Evidence Summary available on the EBM Web site)

- site).
- Severe incontinence
  - Stress incontinence may be treated surgically (e.g. by colposuspension) (Level of Evidence = C; Evidence Summary available on the EBM Web site) according to the judgment of a urogynaecologist.
  - In pure urge incontinence, surgery usually is not effective. An operation aimed at enlarging the bladder may be indicated in extreme cases.
  - The treatment for mixed incontinence is selected according to the dominant type of incontinence.
- Aids: bandages, diapers, urinals, vaginal bullets and cones, (Level of Evidence = A; Evidence Summary available on the EBM Web site) and plastic bedsheets. A specialized nurse is responsible for supplying the aids and educating the patient.

## Related evidence

- Hysterectomy may increase the odds of developing incontinence up to 60% (Level of Evidence = C; Evidence Summary available on the EBM Web site).
- Exercises with myofeedback may be more effective than exercises alone for stress urinary incontinence, but the evidence is insufficient for reliable conclusions (Level of Evidence = D; Evidence Summary available on the EBM Web site).
- There is some evidence suggesting less urinary incontinence after **preventive** pelvic floor muscle training in childbearing women but the evidence is insufficient (Level of Evidence = C; Evidence Summary available on the EBM Web site).
- There was some suggestive evidence that prompted voiding reduces incontinence episodes in the short term (Level of Evidence = C; Evidence Summary available on the EBM Web site).
- There is not enough evidence to draw firm conclusions about the superiority of certain types of absorbent products (Level of Evidence = D; Evidence Summary available on the EBM Web site).
- Single daily intravaginal estriol (0.5 mg) in postmenopausal women does not increase the risk of endometrial proliferation or hyperplasia (Level of Evidence = B; Evidence Summary available on the EBM Web site).
- Abdominal retropubic suspension appears to be better than anterior vaginal repair for subjective cure (Level of Evidence = B; Evidence Summary available on the EBM Web site).
- There is some evidence that laparoscopic colposuspension may have poorer results than open colposuspension. If laparoscopic colposuspension is performed, two paravaginal sutures appear to be more effective than one (Level of Evidence = C; Evidence Summary available on the EBM Web site).
- There is not enough evidence to judge whether suburethral slings are better or worse than other surgical or non surgical managements (Level of Evidence = C; Evidence Summary available on the EBM Web site).
- Bladder neck needle suspension surgery is probably not as good as open abdominal retropubic suspension for the treatment of primary genuine stress urinary incontinence in terms of lower cure rates and higher morbidity (Level of Evidence = C; Evidence Summary available on the EBM Web site).

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